

Community-Led Energy Access: UK–Indonesia Partnership through MENTARI

Written Evidence Submission to the UK International Development Committee

Call for Evidence: Aid for Community-Led Energy

Submitted by MENTARI

Executive Summary`

This submission presents evidence from the UK–Indonesia MENTARI Programme, a £20 million low-carbon energy initiative funded by the UK Foreign, Commonwealth & Development Office (FCDO). MENTARI has supported inclusive, locally owned renewable energy models that directly serve marginalised communities.

Key evidence from programme implementation shows that MENTARI:

- Enabled clean energy access for nearly 1,000 people through a 95 kWp solar PV mini-grid in Central Sumba.
- Created livelihoods by supporting 15 women-led microenterprises through a productive use of energy (PuE) programme.
- Trained 35 local individuals and institutionalised technical knowledge—through SOPs and manuals—within mini-grid and BUMDesa (village enterprise) governance structures.
- Empowered 26 women as Energy Champions, mainstreaming gender in governance and community advocacy.
- Contributed to East Nusa Tenggara’s regional energy planning (RUED) by incorporating lessons from the mini-grid pilot implementation.
- Delivered technical models and financing mechanisms now adopted in Indonesia’s Diesel Replacement Programme (DRP).

This submission is based on MENTARI’s internal reports and official annual reporting from 2020–2025. All evidence cited is documented in the programme’s logframe results, project tracking, and policy work with the government of Indonesia.

Introduction

Between Jakarta’s glass towers and the tourist beaches of Bali lies a different Indonesia—one where millions still cook, study, and trade by the light of kerosene lamps. In 2020, FCDO launched MENTARI (Menuju Transisi Energi Rendah Karbon Indonesia) to address this inequality through clean energy. The programme asked: How can rural communities in

Indonesia run, govern, and pay for their own low-carbon energy systems—and can the lesson be replicated across the country?

MENTARI works to support Indonesia's energy transition through community-based demonstration projects, technical assistance for public and private actors, investment facilitation, and policy reform at national and regional levels.

In Central Sumba, a 95 kWp solar PV mini-grid now supplies 240 households and public facilities across the villages of Mata Redi and Mata Woga. The project integrated gender and social inclusion, capacity building, productive uses, and transparent governance through the village-owned enterprise (BUMDesa Hali Dewa). In 2024, the site was formalised as a Centre of Excellence and its lessons learned contributed to the development of draft Regional Energy Plan (RUED) of East Nusa Tenggara province.

What 'Community Energy' Really Means

In donor brochures, “community energy” is often reduced to the delivery of hardware. MENTARI took a fundamentally different approach—one that centred on local ownership, institutional capacity, and inclusive governance. In Mata Redi and Mata Woga, the solar mini-grid is owned and operated by the village enterprise (BUMDesa), which sets tariffs, manages maintenance, and reinvests revenue into community priorities. A dedicated energy committee guides decisions on electricity use and productive enterprises, ensuring that energy access translates into long-term local development.

To support this model, MENTARI trained 35 villagers—including operators, facilitators, and BUMDesa staff—in technical operations, bookkeeping, tariff systems, and productive use planning. In 2025, the Musyawarah Desa (village council) elected a woman to lead the BUMDesa, reflecting growing community confidence in women's leadership and underscoring the sustainability of inclusive, community-led energy governance.

Why It Matters

UK aid did not stop at infrastructure. FCDO supported feasibility studies, installation, O&M manuals, and three years of on-site mentoring. These investments ensured institutional maturity and long-term use. Key results include:

- 230 tonnes of CO₂ avoided annually;
- ~40% reduction in household energy costs;
- 15+ new women-led microenterprises launched (e.g. candlenut, kiosk, etc);
- Children's study time doubled; gender-based violence risks reduced (District Women's Office data);
- Mata Redi's Solar PV was designated as a Centre of Excellence for vocational training, in cooperation with Don Bosco vocational centre;

- The Ministry of Villages adopted the rural electrification training modules produced by MENTARI for replication.

Seven lessons: a long road ahead for national replication

1. **Capital is heavy.** At roughly £2 300 per connection, a solar mini-grid is beyond the reach of local developers. Government investment into rural electrification, concessional finance, corporate social responsibility contributions and aid funding is essential.
2. **Tariffs are political.** Village heads can be tempted to influence prices below cost. Transparent dividend rules and escrow accounts help, but the pressure resurfaces each election cycle.
3. **Skills are thin.** Central Sumba had only two certified solar technicians at the start. Without a national training pipeline, downtime risks creeping up.
4. **Permits drag.** A stack of approvals from hamlet to province adds up to nine months; MENTARI has drafted a memo urging Jakarta to streamline the process.
5. **Demand may stall.** National surveys show that without business uses, rural power demand plateaus once lighting needs are met—hence the focus on productive use of energy.
6. **Theft happens.** Battery pilferage has derailed other Indonesian schemes; community ownership reduces but does not erase the risk.
7. **Gender push-back.** Promoting women to tariff-setting roles drew early scepticism from male elders; sustained facilitation was needed to calm tensions.

How UK aid tilted the scales

Demonstration as Living Laboratory

Most aid programmes fund construction then file the final report. FCDO paid for the whole cycle: feasibility studies, hardware, three-year O&M contracts, and mentoring for village accountants, technicians, and women entrepreneurs. Because the books stayed open, Indonesian regulators were able to track, month by month, what it really costs to keep a mini-grid alive—and fold those numbers into national policy drafts. Indonesia’s Ministry of Energy cited the Sumba model when developing its 2025 Hybrid RE regulation.

Technical Assistance for other off-grid projects.

Under MENTARI’s Brokerage Strand, technical experts reviewed project documents from developers and linked them to lenders. Dewacoco’s coconut husk biomass plant and Enertec’s solar railway pilot both reached financial close after receiving tailored technical support. “Without those engineering notes the bank would never have signed,” said Johannes Widi, Dewacoco’s founder. The brokerage team also supported larger on-grid

schemes by providing grid impact studies required by PLN before signing any power purchase agreement.

Support to Diesel Replacement Programme

Indonesia still burns diesel at more than 5,000 remote sites. PLN—the state-owned utility that controls generation, transmission, and distribution—requested MENTARI to support its Diesel Replacement Programme (DRP). MENTARI delivered a screening model that ranked sites by fuel cost, solar hours, and grid proximity, along with draft tender documents. This work halved Phase I lead times and helped unlock financing for these projects.

Conclusion: A Replicable Model for Donors

MENTARI's model integrates piloting, technical assistance, financing, and policy advocacy—enabling durable community energy systems. It invested in ownership, inclusion, and long-term delivery. As the UK reflects on its aid strategy for energy access, MENTARI offers a tested, documented, and government-validated model for how donor investments can accelerate just and inclusive transitions at scale.